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TITLE:	Utility Disk Set-Up instructions
ABSTRACT:	Step by step instructions for setting up a Husky Utility Disk.

Introduction

This document has been produced in order to give step by step instructions on creating a utility disk for the FS/3. The utility disk is intended for use as an emergency boot device if the unit should crash irrecoverably during use. The disk must be created from an FS/3 with all files intact and should therefore be made as soon as possible after receipt of the unit and stored safely as a backup device.

Creating the Husky Utility Disk requires the following equipment:

1 x Serial Communications Cable
1 x Husky FS/3 handheld computer
1 x Blank, formatted Floppy disk
1 x Standard IBM compatible P.C.
1 x ORACLE.COM Software

Procedure

1. Creating a Bootable HUD

1.1 Reboot the FS3 and press **ALT F1** before the operating system loads. The FS3 will appear to hang, (if the boot process continues then reboot and try again). When the FS3 boot process has frozen type **yksuh**, the following menu is displayed:

FS3 (C) Husky Computers Ltd. 1997
Select Boot Device
1 Compact Flash
2 Compact Flash & configure ATA PC Card
3 ATA PC Card & configure Compact Flash
4 Floppy disk & configure Compact Flash
5 ATA PC Card only

Select option 4, a second menu will be displayed:

Select Floppy Boot Link
1 COM1
2 COM2
3 Fischer

Select the appropriate communications port (normally COM1), a third menu will be displayed.

Select floppy link speed
1 38400 Bd
2 115200 Bd

Select the desired link speed, the FS3 will beep and then reboot. Note the above screen may vary on certain models

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1.2 On the PC from the DOS prompt run the **oracle.com** program. (Note: If 38400 baud was selected as the floppy link speed then simply typing **oracle enter** is sufficient. However, if 115200 baud was selected then type **oracle /115200 enter**.)

1.3 Insert a blank floppy disk in the PC floppy drive and ensure that a serial communications cable connects the appropriate communications ports on both the PC and the FS3.

1.4 Type **UTIL ENTER**. Select the **Format Diskette** option, set the **Write system files?** value to **Yes** and press **enter**. The FS3 screen will change, indicating that formatting is ready to commence. Verify that the cables are connected and the Oracle software is running then press a key and the FS3 will format the floppy disk. When formatting is complete return to the DOS prompt on the FS3.

1.5 From the root on drive 'C:', type **MD A:\DOS enter**.

1.6 From the root on drive 'C:' type **COPY *.* A:\ enter**, The FS3 will ask if you want to overwrite A:\COMMAND.COM, press '**N enter**', the FS3 will copy all remaining files onto the floppy disk. When the copy is complete type **COPY C:\DOS*.* A:\DOS enter**.

The copy command will not copy hidden files. Therefore if the DRVSPACE.BIN file is required the following steps are required to create a backup:

ATTRIB -R -S -H DRVSPACE.BIN enter
COPY DRVSPACE.BIN A:\ enter.

Note: FS3 with compact flash disks smaller than 10mb will not have the attrib program loaded. Therefore if the DRVSPACE.BIN file is required then an additional MS DOS v6.22 license is must be purchased to allow access to the ATTRIB command.

When the copy is complete a bootable HUD is ready for use.

1.7 Once the HUD has been created it is advisable to disable the boot from floppy option as this will reduce power consumption. Follow the procedure outlined in step 1.1 and select option 1 from the first menu, the FS3 will beep and reboot.

2. Booting from the HUD

2.1 To boot the FS3 from the HUD follow the instructions outlined in steps 1.2 and ensure that the HUD is inserted in the floppy drive on the PC. When the FS3 is rebooted it will report 'booting from floppy disk', upon completion of the boot process the FS3 will wait at the **A:\>** prompt.

3. Restoring the FS3 Disk Image using the HUD

3.1 In the event that it becomes necessary to reformat the compact flash some additional utilities are needed. The Husky FS3 is shipped without the MS DOS FORMAT.COM and ATTRIB.COM programs, therefore it will be necessary to purchase an additional MS DOS v6.22 license. The FORMAT and ATTRIB programs can then be copied onto the HUD and used to format the compact flash.

3.2 With the FORMAT and ATTRIB programs loaded on the HUD boot from the floppy disk as described in step 8. From the A:\> prompt type **FORMAT C:/s/u enter**.

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3.3 When the format process is complete type **COPY A:*.* C:\ enter**. This will restore files to the root directory of drive C:.

3.4 It is important to set the correct file attributes to prevent accidental deletion of the files. Set the file attributes as follows:

ATTRIB *.* enter,	note that the IO.SYS and MSDOS.SYS file attributes are SHR.
ATTRIB +R *.* enter,	this will set all remaining file attributes R.
ATTRIB -R AUTOEXEC.BAT,	need read/write access to this file.
ATTRIB -R CONFIG.SYS,	need read/write access to this file.
ATTRIB -R HCARD.INF,	need read/write access to this file.

3.5 Once the root directory has been correctly configured the contents of the DOS directory must be restored as follows:

MD DOS enter,	Create the directory on drive C:.
COPY A:\DOS*.* C:\DOS enter,	Copy files.

3.6 Once the disk image has been restored it is recommended that the boot from floppy option is disabled as this will reduce power consumption. Follow the procedure outlined in step 1.1 and select option 1 from the first menu, the FS3 will beep and reboot.

IMPORTANT NOTE

The information provided in this technical note details the instructions necessary to create and use a HUD. Where it is necessary to use DOS utilities that are not provided on the FS3 the user must ensure that sufficient user licenses are available and satisfy themselves that the licensing conditions are complied with.

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